



# Material Safety Data Sheet

## Creatine Monohydrate MSDS

### 1. SUBSTANCE IDENTIFICATION

- 1.1. Product Name: [Creatine Monohydrate](#)
- 1.2. Description: Creatine Monohydrate is a nitrogenous organic acid manufactured through chemical synthesis.
- 1.3. Chemical Formula: C<sub>4</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>·(H<sub>2</sub>O)
- 1.4. Molecular weight: 149.13
- 1.5. CAS #: 6020-87-7
- 1.6. EINECS #: Not Applicable
- 1.7. Manufactured by: Foodchem International Corporation, Shanghai China.
- 1.8. Supplied by: Foodchem International Corporation, Shanghai China.
- 1.9. Usage: In food as Nutrition supplements

### 2. Composition

- 2.1. Creatine Monohydrate: 99.90%
- 2.2. Hazardous impurities: Creatinine 50PPM, Heavy Metals 10PPM, Lead 0.1PPM

### 3. Physical/Chemical Characteristics

- 3.1. Physical State: Powder
- 3.2. Appearance: White crystal or crystalline powder
- 3.3. Odor: Odorless
- 3.4. pH: Not available
- 3.5. Melting point/range: 303 ° C
- 3.6. Boiling point: Decomposes
- 3.7. Bulk density: 1.3 g/cm<sup>3</sup>
- 3.8. Solubility: Partially soluble in cold water

### 4. Stability/Reactivity

- 4.1. Chemical Stability: Stable under normal temperatures and pressures
- 4.2. Shelf Life: 24 months period
- 4.3. Hazardous decomposition: Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...)
- 4.4. Hazardous polymerization: Will not occur
- 4.5. Incompatible with: Not available

### 5. Handling/Storage

- 5.1. Storage: kept in dry, cool, and shaded place with original packaging, avoid moisture, store at room temperature.
- 5.2. Handling precaution: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest.

### 6. Exposure Control

- 6.1. Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- 6.2. Respiratory protection: NIOSH/MSHA or European Standard EN 149 approved respirator
- 6.3. Eye Protection: Protective eyeglasses or chemical safety goggles
- 6.4. Skin Protection: Wear appropriate protective gloves and clothes to minimize skin contact.
- 6.5. Other: Consult professionals if Creatine Monohydrate need to be handled under some special conditions.



## 7. Hazards Identification

- 7.1. Hazardous overview: Creatine Monohydrate is Very hazardous in case of ingestion
- 7.2. Contact with eyes: May cause eye irritation.
- 7.3. Contact with skin: May cause skin irritation.
- 7.4. Ingestion: May cause irritation of the digestive tract.
- 7.5. Inhalation: May cause respiratory tract irritation.
- 7.6. Other: Not Applicable

## 8. First Aid Measures

- 8.1. Contact with eyes: Flush immediately with plenty of water for 15 minutes and seek medical advice
- 8.2. Contact with skin: Wash the affected area with water, remove contaminated clothing and launder before re-use. Seek medical advice if irritation develops or persists.
- 8.3. Ingestion: Rinse mouth thoroughly with water and drink water afterwards.
- 8.4. Inhalation: Remove from exposure, move to fresh air and seek medical advice immediately.

## 9. Fire and Explosion Data

- 9.1. General information: May be combustible at high temperature
- 9.2. Flash point: Not available
- 9.3. Ignition control: Avoid ignition sources where Creatine Monohydrate dust might be generated
- 9.4. Dust control: Keep the handling area with adequate ventilation
- 9.5. Extinguishing Media: Water spray, dry chemical or carbon dioxide
- 9.6. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container

## 10. Transport Information

- 10.1. No special requirements and no restrictions on transportation by land, sea or air.

## 11. Ecological Information

- 11.1. Creatine Monohydrate is fully biodegradable and the products of degradation are more toxic.

## 12. Other Information

- 12.1. This Safety Data Sheet of Creatine Monohydrate is based upon a limited review of Foodchem International Corporation files and standard Toxicological handbooks. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Foodchem International Corporation be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Foodchem International Corporation has been advised of the possibility of such damages.

Website: <http://www.foodchemadditives.com>

E-Mail: [inquiry@foodchem.cn](mailto:inquiry@foodchem.cn)  
[Creatine Monohydrate MSDS](#)